Index of Claims

Application/Control No.

Applicant(s)/Patent under Reexamination

10/072,455

KAWAMOTO ET AL.

Examiner

Art Unit

Tarifur R. Chowdhury

2871

Rejected Allowed

(Through numeral) Cancelled

Restricted

Non-Elected Interference

**Appeal** Α 0 Objected

| E     E     B     B     E  | Cla | aim      | im    |   |          |          | Date     |          |        |          |          |   | Claim |          |   | Date |   |   |          |   |   |
|--|-----|----------|-------|---|----------|----------|----------|----------|--------|----------|----------|---|-------|----------|---|------|---|---|----------|---|---|
| 2  |     |          | 3/9/9 |   |          |          |          |          |        |          |          |   | Final | Original |   |      |   |   |          |   |   |
| 2  |     | <u> </u> | 1     |   | _        |          |          |          |        | <u> </u> | -        |   |       | 51       |   |      | _ | _ | -        | H | ├ |
| 3  |     |          |       |   |          | 一        |          | _        | _      | <u> </u> |          |   |       |          |   |      |   |   | $\vdash$ |   | t |
| 4   V   5   V   5   5   5   5   5   5   5  |     | 3        |       | М | $\vdash$ |          | -        | $\vdash$ | m      | H        |          |   |       | 53       |   |      |   |   | _        |   | ┢ |
| 5    V   |     |          |       |   |          |          |          |          | _      |          | $\vdash$ |   |       |          |   |      |   | _ | _        | _ | r |
| Section   Sect |     |          |       | П | Т        | Т        | $\vdash$ | ┢        | ┢      | ┢        |          |   |       |          |   |      |   |   |          |   | r |
| T  |     |          | 1     |   |          |          | <u> </u> | Т        | _      | _        |          |   |       |          |   |      |   | Г | I        | П | r |
| S  |     |          | -     |   |          |          |          | Г        | _      |          |          |   |       |          |   |      |   |   |          |   | Γ |
| 10   |     |          | 1     |   |          |          | П        | Γ        | Г      |          |          |   |       |          |   |      |   |   |          |   | Γ |
| 11   |     | 9        | 1     |   |          |          | Γ        | Г        |        |          |          |   |       | 59       |   |      |   | Г | Γ        | Г | Γ |
| 12   v   |     | 10       | 1     |   |          |          |          |          | Γ      |          | T        |   |       | 60       |   |      |   |   |          |   | Γ |
| 13   |     | 11       |       |   | Г        |          |          | Г        |        |          |          |   |       | 61       |   |      |   |   |          |   | Γ |
| 14   |     | 12       | 1     |   |          |          |          |          |        |          |          |   |       |          |   |      |   |   |          |   | Γ |
| 15   -   |     | 13       | 1     |   |          |          |          | Γ        | Γ      |          |          |   |       | 63       |   |      |   |   |          |   | Γ |
| 16   |     | 14       | 1     |   |          |          | Γ        |          |        |          |          |   |       |          |   |      |   |   |          |   | Γ |
| 17   |     | 15       | -     | - |          |          |          |          |        |          |          |   |       | 65       |   |      |   |   |          |   | Γ |
| 17   |     | 16       |       |   |          |          | Π        | Г        |        |          | Г        | Ì |       | 66       |   |      |   |   |          |   | Γ |
| 19   \( \)   |     |          | 1     |   |          |          |          | Г        |        |          | Г        | ĺ |       | 67       |   |      |   |   |          |   | Γ |
| 20   V   70   71   72   72   73   74   75   75   76   77   77   77   77   77   |     | 18       | 1     |   |          |          |          | Π        |        |          | Г        | ĺ |       |          |   |      |   |   |          |   | Γ |
| 21   |     |          | 1     |   |          |          |          | Γ        |        |          | Г        | İ |       |          |   |      |   |   |          |   | Γ |
| Text   |     | 20       | V     |   |          |          | П        | Г        |        |          | Г        |   |       | 70       |   |      |   |   |          |   | Γ |
| 23   V   |     | 21       | 1     |   |          |          | П        | Г        | Π      |          |          |   |       | 71       |   |      |   |   |          |   | Γ |
| 24   |     | 22       |       |   | Г        |          | П        | Г        |        | Г        | Г        |   |       | 72       |   |      |   | Г |          | Г | Γ |
| 25   |     |          | V     |   | Г        | Π        | Π        |          | Γ      |          |          | ĺ |       | 73       |   |      |   | Г |          | П | Γ |
| 26   √     27   √     28   -     29   √     30   √     31   √     32   √     33   √     34   √     35   √     36   √     38   88     39   89     40   90     41   91     42   92     43   94     44   94     45   96     47   98     48   99   |     | 24       | 1     |   | Г        | Г        | Г        | Г        | П      | Π        | Г        | ĺ |       |          |   |      |   |   |          | Г | Γ |
| 27   V   77   78   79   79   79   79   79   79   |     | 25       | V     |   | Г        | Г        | П        | П        |        |          |          | ĺ |       | 75       |   |      |   | Γ |          |   | Γ |
| 28 -   78     29 √   79     30 √   80     31 √   81     32 √   82     33 √   83     34 √   84     35 √   85     36 √   86     37 √   87     38   88     39   89     40   90     41   91     42   92     43   94     45   95     46   96     47   97     48   99     49   99  |     | 26       | 1     |   |          |          | Π        |          | Π      |          |          | ĺ |       | 76       |   |      |   |   |          | П | Γ |
| 28 -   78     29 √   79     30 √   80     31 √   81     32 √   83     33 √   83     34 √   84     35 √   85     36 √   86     37 √   87     38   88     39   89     40   90     41   91     42   92     43   94     44   94     45   96     47   97     48   99     49   99  |     | 27       | 1     |   | Г        |          | Г        | П        |        |          |          | ĺ |       | 77       |   |      | Γ | Γ | Г        | Г | Γ |
| 30   |     |          | Ι-    |   | Г        |          |          | П        |        | Г        |          | ĺ |       | 78       |   |      |   | Г | T        |   | T |
| 31   |     | 29       | 1     |   | Г        | $\vdash$ | T        | Г        | Г      | Γ        |          | ĺ |       | 79       |   | Г    |   | Г | Π        | Г | Γ |
| 32  \ \  |     |          | 1     |   |          | Г        |          | Π        | Г      |          |          | ĺ |       |          |   |      |   |   |          |   | Γ |
| 33   V     83   84     85   85   86   87   87   88   88   88   88   88   |     | 31       | 1     |   |          |          | Π        | Г        |        | Г        |          | 1 |       | 81       |   | Г    |   | Γ | T        | Γ | T |
| 33   V   |     | 32       | 1     | Г | Г        | Γ        | Γ        | Γ        | Π      |          |          |   |       | 82       |   |      |   |   |          |   | Γ |
| 35   |     | 33       | 1     |   |          |          |          |          |        |          |          | 1 |       | 83       |   |      |   |   |          |   | Γ |
| 36 \( \) 86   37 \( \) 87   38 88   39 89   40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     | 34       | 1     |   |          |          | Г        |          | П      |          |          | 1 |       | 84       |   |      | Г | Γ |          |   | Γ |
| 37 \( \) 87   38 88   39 89   40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     | 35       | V     |   |          | Г        | Π        |          | Г      |          |          | 1 |       | 85       |   |      |   |   |          |   | Γ |
| 38 88   39 89   40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     | 36       | V     |   |          | Π        | Π        | Π        | П      | Т        | Π        | 1 |       | 86       |   |      |   |   |          |   | Γ |
| 39 89   40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     | 37       | 1     |   |          |          |          |          |        |          |          | 1 |       | 87       |   |      |   |   | Π        | Г | Γ |
| 40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     | 38       | İ     | Г |          | 1        | Π        | T        |        | Π        |          | ĺ |       | 88       | Г |      |   |   |          | Г | Γ |
| 40 90   41 91   42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     |          | 1     | Г | Г        |          | Π        | Ī        | $\Box$ |          |          | ĺ |       |          |   |      | Г | Π | Г        |   | Γ |
| 42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     |          | Π     | Г |          | П        | Г        | П        |        |          |          | ĺ |       | 90       | Г |      | Г |   | Γ        | Г | Г |
| 42 92   43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     | 41       |       |   |          |          |          |          | Π      |          |          | ĺ |       | 91       |   | Г    |   | Π |          |   | Γ |
| 43 93   44 94   45 95   46 96   47 97   48 98   49 99  |     | 42       |       | Г |          |          | Π        |          |        |          |          | 1 |       | 92       | Г |      | Г |   |          | Г | Γ |
| 44 94   45 95   46 96   47 97   48 98   49 99  |     | 43       |       |   |          |          |          |          |        |          |          | ] |       | 93       |   |      |   |   | Г        |   | Γ |
| 45 95 96 96 97 48 98 99 99   |     | 44       |       |   |          |          |          |          |        |          |          | ] |       | 94       |   |      |   |   |          |   | Γ |
| 46 96 97 97 48 98 99 99  |     |          |       |   |          |          |          |          |        | Π        |          | ] |       | 95       |   |      |   |   |          |   | Γ |
| 47 97 98 98 99 99  |     |          | Π     | T | Γ        | $I^-$    | Γ        |          | $I^-$  | Π        | Γ        | ĺ |       | 96       | Γ |      | Γ | Π |          | Г | T |
| 48 98 99 99 99 99 99 99 99 99 99 99 99 99  |     |          | Γ     |   | Г        | Π        | Γ        | Ι        |        |          | П        | 1 |       | 97       | Γ |      | T | 1 | Γ        | Г | T |
| 49 99 99   |     | 48       |       |   | Π        | Π        |          |          | Γ      |          | Г        | ] |       | 98       |   |      |   |   |          | Г | Γ |
| 50 100 100   |     | 49       |       |   |          |          |          |          |        |          |          | ] |       | 99       |   |      |   |   |          |   | Γ |
|  |     |          |       |   |          |          |          |          |        |          | $\Box$   | ] |       | 100      |   |      |   |   |          |   | Γ |

| Cla      | Claim    |               | Date         |  |  |  |  |  |  |          |  |  |
|----------|----------|---------------|--------------|--|--|--|--|--|--|----------|--|--|
|          |          |               |              |  |  |  |  |  |  |          |  |  |
| <u></u>  | Original |               |              |  |  |  |  |  |  |          |  |  |
| Final    | iĝi      |               |              |  |  |  |  |  |  |          |  |  |
| 1 "      | ō        |               |              |  |  |  |  |  |  |          |  |  |
| <u> </u> |          |               |              | _  | _  | _  |  |  | Н  |          |  |  |
| -        | 51       |               |              |  | Н  |  |  | _  | $\vdash$   |          |  |  |
|          | 52<br>53 |               |              |  | Н  |  |  |  |  |          |  |  |
|          | 53       | _             | _            |  |  | _  |  |  |  |          |  |  |
|          | 54       |               |              |  |  |  |  |  |  |          |  |  |
|          | 55       |               |              |  |  |  |  |  |  |          |  |  |
|          | 56       |               |              |  |  |  |  |  |  | _        |  |  |
|          | 57<br>58 |               |              |  |  |  |  |  |  |          |  |  |
|          | 58       |               |              |  |  |  |  |  |  |          |  |  |
| L        | 59       |               |              |  |  |  |  |  |  |          |  |  |
|          | 60       |               |              |  |  |  |  |  |  |          |  |  |
|          | 61       |               |              |  |  |  |  |  |  |          |  |  |
|          | 62       |               |              |  |  |  |  |  |  |          |  |  |
|          | 63       |               |              |  |  |  |  |  |  |          |  |  |
|          | 63<br>64 |               |              |  |  |  |  |  |  |          |  |  |
|          | 65       |               |              |  |  |  |  |  |  |          |  |  |
|          | 66       | _             |              | _  |  |  |  |  | П  |          |  |  |
|          | 66<br>67 |               |              |  | Т  | $\vdash$   |  |  |  | $\Box$   |  |  |
|          | 68       |               |              |  |  |  |  |  |  | _        |  |  |
|          | 69       |               |              |  |  |  |  |  |  | _        |  |  |
|          | 70       | _             |              | _  | _  |  |  |  |  |          |  |  |
|          | 71       | _             |              |  |  |  |  |  |  | -        |  |  |
|          | 72<br>73 |               |              |  | _  | _  |  | $\vdash$   | _  | _        |  |  |
|          | 73       |               |              |  | Г  |  |  | Н  |  |          |  |  |
|          | 74       | _             |              | _  |  |  |  | Г  |  |          |  |  |
|          | 74<br>75 | $\overline{}$ |              |  | _  | $\vdash$   | _  | _  | _  |          |  |  |
| <b>—</b> | 76       |               |              |  | Т  |  |  |  |  |          |  |  |
|          | 77       |               |              |  | $\vdash$   |  |  |  |  |          |  |  |
|          | 78       |               |              |  |  |  | _  | _  |  | _        |  |  |
|          | 79       |               |              |  | $\vdash$   |  | Т  | $\vdash$   |  | _        |  |  |
|          | 80       |               |              |  |  |  |  | Г  |  |          |  |  |
|          | 81       |               | $\vdash$     |  | $\vdash$   | _  | _  | _  | _  |          |  |  |
|          | 82       |               | Т            |  | $\vdash$   |  |  |  |  |          |  |  |
|          | 83       |               |              |  | $\vdash$   |  | l  | $\vdash$   |  | Т        |  |  |
|          | 84       |               |              | $\vdash$   | $\vdash$   | -  | <u> </u>   | <del> </del>                                     | <b> </b>   | l        |  |  |
|          | 85       |               |              | 1  | <u> </u>   |  | $\vdash$   |  |  |          |  |  |
|          | 86       | -             | -            | _  | -  |  |  | $\vdash$   | $\vdash$   |          |  |  |
|          | 87       | ┢═            |              | _  |  |  | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$ |  |  |
|          | 88       | $\vdash$      | $\vdash$     | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$   | $\vdash$ |  |  |
| <b>—</b> | 89       | $\vdash$      | _            | $\vdash$   | -  | $\vdash$   | -  | $\vdash$   | $\vdash$   | $\vdash$ |  |  |
|          | 90       | $\vdash$      | $\vdash$     | $\vdash$   | _  | -  | <del>                                     </del> | <del>                                     </del> | <del>                                     </del> | $\vdash$ |  |  |
|          | 91       | $\vdash$      | $\vdash$     | <del>                                     </del> | ┢  |  | -  | $\vdash$   | <del>                                     </del> | $\vdash$ |  |  |
|          | 92       | $\vdash$      | <del> </del> | <del>                                     </del> | ┢  |  | -  | $\vdash$   | $\vdash$   | $\vdash$ |  |  |
| -        | 93       |               | $\vdash$     | $\vdash$   | $\vdash$   | 一  | <del>                                     </del> |  | <del>                                     </del> | _        |  |  |
|          | 94       | $\vdash$      | $\vdash$     | Н  | $\vdash$   | $\vdash$   | <del>                                     </del> | ┰  | 一  |          |  |  |
|          | 95       |               | T            | Н  | $\vdash$   | 一  | <del>                                     </del> | $\vdash$   | $\vdash$   |          |  |  |
|          | 96       | $\vdash$      | _            | $\vdash$   | $\vdash$   | <del>                                     </del> | T  | $\vdash$   | T  | $\vdash$ |  |  |
|          | 97       | $\vdash$      | _            | <del>                                     </del> | <del>                                     </del> | T  | T  | T  | T  |          |  |  |
|          | 98       | l -           | 1            | T  | T  | <u> </u>   | <del>                                     </del> | <del>                                     </del> | T  | 一        |  |  |
|          | 99       | $\vdash$      | <u> </u>     | ┌  | <del>                                     </del> | Г  | T  | $\vdash$   | Г  |          |  |  |
|          | 100      | Т             | Ι            | Г  | T  | $\vdash$   | T  | $\vdash$   | T  |          |  |  |

| Claim |                   | Deta .       |          |          |          |          |              |          |          |  |  |  |
|-------|-------------------|--------------|----------|----------|----------|----------|--------------|----------|----------|--|--|--|
| Cla   | _                 | _            |          |          | Date     | •        |              | _        | ᅥ        |  |  |  |
| Final | Original          |              |          |          |          |          |              |          |          |  |  |  |
|       | 101<br>102        |              |          |          |          |          |              |          |          |  |  |  |
|       | 102               |              |          |          |          |          |              |          |          |  |  |  |
|       | 103               | Ш            | _        |          |          |          |              |          |          |  |  |  |
|       | 104               |              |          |          |          | _        |              |          |          | $\Box$                                       |  |  |
|       | 105               |              | _        |          |          | _        |              |          |          |  |  |  |
|       | 106<br>107        | _            | _        | _        | _        |          | -            |          | _        |  |  |  |
|       | 107               |              | _        |          | _        |          |              | _        |          | -  |  |  |
|       | 109               |              | _        |          |          |          |              | -        |          |  |  |  |
|       | 110               | $\vdash$     | _        |          | _        | _        |              | $\vdash$ | _        |  |  |  |
|       | 111               | П            | Т        | П        |          |          | П            |          | _        | П  |  |  |
|       | 112               |              |          |          |          |          |              |          |          |  |  |  |
|       | 112<br>113        |              |          |          |          |          |              |          |          |  |  |  |
|       | 114<br>115        |              |          |          |          |          |              |          |          |  |  |  |
|       | 115               | Ш            |          |          |          |          |              |          |          |  |  |  |
|       | 116               | _            |          |          |          |          |              |          |          |  |  |  |
|       | 117<br>118        | _            | _        | _        | -        | _        |              | _        |          |  |  |  |
|       | 119               | -            |          | _        |          |          | <u> </u>     |          | -        | $\vdash$                                     |  |  |
|       | 120               | H            |          |          | -        | <u> </u> | -            |          | -        | H  |  |  |
|       | 121               | ┢┈           |          |          |          | -        |              |          | -        |  |  |  |
|       | 120<br>121<br>122 |              |          |          | _        | _        |              | _        | $\vdash$ |  |  |  |
|       | 123<br>124        |              |          |          |          |          |              |          |          |  |  |  |
|       | 124               |              |          |          |          |          |              | Ш        |          |  |  |  |
|       | 125               |              | L        | Ш        |          |          | L_           | _        |          | Ц  |  |  |
|       | 125<br>126<br>127 | <u> </u>     | <u> </u> |          | L        |          |              | <b> </b> | _        | $\vdash$                                     |  |  |
|       | 127               |              | ├        |          | <u> </u> |          | <u> </u>     |          |          | Н  |  |  |
|       | 128<br>129        |              |          | _        | ┝        |          | _            | -        | -        | Н  |  |  |
|       | 130               | -            | -        |          | -        |          | $\vdash$     | -        | $\vdash$ | Н  |  |  |
|       | 131               | _            | -        | _        | <b>—</b> | -        | _            | -        | -        | Н  |  |  |
|       | 131<br>132        | _            |          | ┢        |          |          |              |          |          |  |  |  |
|       | 133               |              |          |          |          |          |              |          |          |  |  |  |
|       | 134<br>135        |              |          |          |          |          |              |          |          |  |  |  |
|       | 135               | _            | _        | _        | _        | <u> </u> | L            | _        | _        | <u>                                     </u> |  |  |
|       | 136<br>137        | <u> </u>     | L        | $\vdash$ | $\vdash$ | $\vdash$ | _            | <u> </u> | _        | Н  |  |  |
|       | 137               | H            | ┞        | ⊢        | -        | ⊢        | _            | ⊢        | _        | Н  |  |  |
| ļ     | 138<br>139        |              | ├        | ⊢        | $\vdash$ | ⊢        | -            | -        | -        | $\vdash$                                     |  |  |
|       | 140               | <del> </del> | ├        | ├        | -        | ┢        | ⊢            | ⊢        | -        | -  |  |  |
|       | 141               | $\vdash$     | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$ | $\vdash$     | -        | _        | Н  |  |  |
|       | 142               | Т            | T        | T        | $\vdash$ | Т        | $\vdash$     | Г        | Г        | П  |  |  |
|       | 143               |              |          |          |          |          |              |          |          |  |  |  |
|       | 144               |              |          |          |          |          |              |          |          |  |  |  |
|       | 145               |              |          |          |          |          |              |          |          |  |  |  |
|       | 146               | _            | L        | <u> </u> | <u> </u> | <u> </u> | $oxed{oxed}$ | _        |          | Ш  |  |  |
|       | 147               | -            | <u> </u> | $\vdash$ | $\vdash$ | <u> </u> | _            | _        | <u> </u> | Ш  |  |  |
|       | 148<br>149        | -            | _        |          | ├-       | -        | <del> </del> | -        | _        | $\vdash$                                     |  |  |
|       | 150               | $\vdash$     | -        | ├-       | ├─       | -        | <del> </del> | ├        | ├        | -  |  |  |
|       | 1 100             | <u> </u>     | <u> </u> |          |          |          |              |          |          |  |  |  |